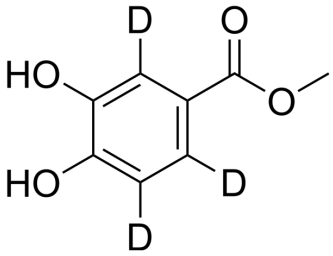
Methyl 3,4-dihydroxybenzoate-d_3-1

Cat. No.:	HY-Z0548S1
CAS No.:	2733147-54-9
Molecular Formula:	$C_8H_5D_3O_4$
Molecular Weight:	171.17
Target:	Keap1-Nrf2; Apoptosis; Isotope-Labeled Compounds
Pathway:	NF-κB; Apoptosis; Others
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	Methyl 3,4-dihydroxybenzoate-d_3-1 is the deuterium labeled Methyl 3,4-dihydroxybenzoate. Methyl 3,4-dihydroxybenzoate (Protocatechuic acid methyl ester; Methyl protocatechuate) is a major metabolite of antioxidant polyphenols found in green tea. Antioxidant and anti-inflammatory effect[1].
In Vitro	Stable heavy isotopes of hydrogen, carbon, and other elements have been incorporated into drug molecules, largely as tracers for quantitation during the drug development process. Deuteration has gained attention because of its potential to affect the pharmacokinetic and metabolic profiles of drugs[1]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Russak EM, et al. Impact of Deuterium Substitution on the Pharmacokinetics of Pharmaceuticals. Ann Pharmacother. 2019;53(2):211-216.

[2]. Ameeramja J, et al. Protocatechuic acid methyl ester ameliorates fluoride toxicity in A549 cells. Food Chem Toxicol. 2017 Nov;109(Pt 2):941-950.

[3]. Ameeramja J, et al. Protocatechuic acid methyl ester modulates fluoride induced pulmonary toxicity in rats. Food Chem Toxicol. 2018 Aug;118:235-244.

Tel: 609-228-6898 Fax: 609-228-5909 E-mail: tech@MedChemExpress.com
Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA